

## Mathematics General Science Test Hard Mode

Sr	Questions	Answers Choice
1	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. 2 B. 1 C. 3 D. 4
2	If a cone is cut by a plane perpendicular to the axis of the cone, then the section is a	A. Parabola B. Circle C. Hyperbola D. Ellipse
3	The number of diagonals of a six sided figure are	A. 9 B. 6 C. 12 D. 3
4	The graph of a quadratic function is	A. Circle B. Ellipse C. Parabola D. Hexagon
5	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. Unit matrix B. Diagonal matrix C. Nilpotent matrix D. Zero matrix
6	Which of the following is the subset of all sets?	B. {1, 2,3} D. {0}
7	Question Image <input style="width: 500px; height: 20px;" type="text"/>	A. A linear equation B. A cubic equation C. A quadratic equation D. An equation for circle
8	The nth term of of A.P:1,5,9,15,..... is given by	A. $4n - 3$ B. $4n + 1$ C. $3n - 4$ D. $4n + 3$
9	If c is a constant number and if f is the function defined by the equation $f(x) = c$ for all values of x, then f is differentiable at every x and f is defined the equation $f'(x) =$ _____	A. f B. 1 C. C D. 0
10	A farmer possesses 100 hectometers of land and wants to grow corn and wheat. Cultivation of corn requires 3 hours per hectometer while cultivation of wheat requires 2 hours per hectometer. Working hours cannot exceed 240. If he gets a profit of Rs. 20 per hectometer for corn and Rs. 20 per hectometer for wheat. The profit function for the farmer is	A. $P(x,y) = 20x + 15y$ B. $P(x,y) = 2x + 3y$ C. $P(x,y) = x + y$ D. $P(x,y) = 3x + 2y$
11	Question Image <input style="width: 500px; height: 20px;" type="text"/>	D. None
12	If you are looking a high point from the ground, then the angle formed is	A. Angle of elevation B. Angle of depression C. Right angle D. Horizon
13	Question Image <input style="width: 500px; height: 20px;" type="text"/>	
14	The constant distance of all points of the circle from its centre is called the	A. Radius of the circle B. Secant of the circle C. Chord of the circle D. Diameter of the circle
15	An angle of one radian is equivalent to	A. $90^\circ$ B. $60^\circ$ C. $67^\circ$ D. $57^\circ$

16

Question Image

- A. Free vector
- B. Null vector
- C. Unit vector
- D. None of these

17

Question Image

- A. 2
- B. 1
- C. 0

18

If  $f_1(x)$  and  $f_2(x)$  are any two anti derivatives of a function  $F(x)$ , then the value of  $f_1(x) - f_2(x) =$

- A. A variable
- B. A constant
- C. undefined
- D. infinity

19

Question Image

- A. An irrational number
- B. Whole number
- C. A positive integer
- D. A rational number

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Write the first four terms of the arithmetic sequence if  $a_1 = 5$  and other three consecutive terms are 23, 26, 29

- A. 23, 26, 29, 32
- B. 5, 8, 11, 14
- C. 8, 11, 14, 17
- D. None of these